

REMARKS

With entry of this Amendment, claims 1, 5, 7-10, 12, 15, 17, 18, and 21-30 are pending. Applicants have canceled claim 11 without prejudice or disclaimer of the subject matter of that claim. Applicants amended claims 1, 12, and 18 to remove the recitation of cyclic adenosine 3',5'-monophosphate, as a purine nucleic acid-related substance. Applicants also added new claims 21-30. Support for these amendments may be found in the specification at, for example, page 11, lines 13-18, Example 1, and in the original claims. Applicants believe that these amendments do not introduce new matter.

Applicants acknowledge with appreciation the Office's withdrawal of the prior objections to the specification and to the claims and the withdrawal of the prior rejections under 35 U.S.C. §§ 112, second paragraph, 101 and 102. The Office maintains the rejections based on alleged obvious-type double patenting and 35 U.S.C. §103. Applicants address these rejections below.

Obviousness-Type Double Patenting

Claims 1, 5, and 7-11 remain rejected under judicially created doctrine of obviousness-type double patenting in light of claims 5 and 6 in U.S. Application No. 11/722,965. Office Action, p. 4. According to the Office, both sets of claims are directed to a composition comprising an adenosine monophosphate and an ascorbic acid derivative. *Id.* Although there are additional components present in the compositions of the copending claims, the Office interprets the term "comprising" as an open term that allows other components not recited in the instant claims to be present. *Id.*

Applicants previously referred the Office to MPEP § 804, which instructs as follows with regard to obvious-type double patenting:

If a “provisional” nonstatutory obviousness-type double patenting (ODP) rejection is the only rejection remaining in the earlier filed of the two pending applications, while the later-filed application is rejectable on other grounds, the examiner should withdraw that rejection and permit the earlier-filed application to issue as a patent without a terminal disclaimer. * * * If “provisional” ODP rejections in two applications are the only rejections remaining in those applications, the examiner should withdraw the ODP rejection in the earlier filed application thereby permitting that application to issue without need of a terminal disclaimer.

Clearly, whether or not the Office can reject the claims in the ‘965 application on other grounds, the Office should withdraw the obviousness-type double patenting rejection in the earlier application without the need for a terminal disclaimer when that rejection is the only remaining rejection. In this case, the instant application was filed before the ‘965 application, making the instant application the “earlier filed” application. As MPEP § 804 instructs, once this obviousness-type double patenting rejection becomes the last remaining rejection, the Office should withdraw it. For the reasons set forth below regarding the Office’s rejection under 35 U.S.C. § 103(a), Applicants contend that this obviousness-type double patenting rejection is the last remaining rejection and as such should be withdrawn to allow the instant application to issue to a U.S. patent.

Rejection Under 35 U.S.C. § 103

The Examiner continues to reject claims 1, 3, 5-13, and 15-18 under 35 U.S.C. § 103(a) as allegedly obvious over Wakamatsu et al. (WO 02/41853; U.S. Patent 6,946,436) in view of Castiel et al. (published U.S. Patent Application 2002/0042380 A1). Office Action, p. 5. According to the Office, Wakamatsu teaches an oil-in-water

(O/W) emulsion comprising an electrolyte where the preferred electrolytes are adenosine monophosphate, cyclic adenosine monophosphate, salts thereof, ascorbic acid, and derivatives thereof. *Id.* Wakamatsu also allegedly teaches that adenylic acid derivatives have moisturizing and anti-aging effects when applied to the skin and that electrolytes can be used alone or in combination of two or more species. *Id.* The Office acknowledges that Wakamatsu does not teach a composition in which AMP and an ascorbic acid derivative are combined nor does Wakamatsu teach the function of ascorbic acid derivatives. *Id.* at p. 6.

The Office applies Castiel for its alleged teaching of vitamin C derivatives with improved stability for combating intrinsic aging of the skin. *Id.* According to the Office, Castiel lists ascorbic acid 2-glucoside as one of the preferred derivatives. *Id.*

Combining the alleged teachings of Wakamatsu and Castiel, the Office suggests that it would have been obvious to combine an AMP with an ascorbic acid derivatives as allegedly taught in Wakamatsu wherein the derivative is ascorbic acid 2-glucoside as allegedly taught in Castiel. *Id.* at 7. The Office contends that one of ordinary skill in the art would have been motivated to combine Wakamatsu and Castiel because the references allegedly teach that AMP derivatives and ascorbic acid derivatives are used for the same purpose, to keep skin from aging. *Id.* Applicants respectfully traverse for the following reasons.

First, Applicants previously noted that, while adenosine phosphates may be taught as a type of electrolyte in Wakamatsu, ascorbic acid is but one of several additional possible electrolytes recited in Wakamatsu. See Amendment filed April 30, 2008, p. 12. To pick out ascorbic acid in particular from Wakamatsu's long list, let alone ascorbic acid 2-glucoside specifically from Castiel in the face of thousands of possible

combinations, requires improper hindsight based on the teaching of the instant specification. *Id.*

The Office now suggests that reasoning based on hindsight is permissible as long as it does not include information provided only by the instant specification. Office Action, p. 8. More importantly, the Office notes that “one of ordinary skill in the art would have reasonably selected *any* of the disclosed electrolytes, including ascorbic acid derivatives” *Id. Emphasis added.* By making this statement, the Office admits that Wakamatsu does not point the skilled artisan towards the claimed invention because Wakamatsu assigns equal value to the rest of the electrolytes taught in that reference. Thus, without the instant specification’s teaching of the benefit in combining ascorbic acid 2-glucoside with an adenosine phosphate, one of ordinary skill in the art would not have arrived at the claimed invention based on Wakamatsu. Absent the specific selection of ascorbic acid in Wakamatsu, Castiel’s disclosure of ascorbic acid 2-glucoside as a derivative becomes weaker, if not irrelevant. The Office violates its own statement of what constitutes improper hindsight in that it uses the specification to conclude from Wakamatsu that it would have been obvious to make the specific combination of ascorbic acid with an adenosine phosphate, let alone the more specific combination of ascorbic acid 2-glucoside with an adenosine phosphate.

The present invention involves a combination of (A) ascorbic acid 2-glucoside and (B) at least one purine nucleic acid-related substance selected from the group consisting of adenosine 2'-monophosphate, adenosine 3'-monophosphate, adenosine 5'-monophosphate, and a salt thereof. Indeed, the invention provides an excellent skin antiaging effect, since the skin antiaging action of the aforementioned component (A) is synergistically potentiated through its combination with the aforementioned component

(B). These remarkable effects are disclosed on page 19, lines 3-29 of the specification and are supported by Test Example 1 (see Fig. 1).

In contrast, Wakamatsu appears to teach that an O/W emulsion composition may generally contain various types of ingredients including electrolytes, such as AMP and like purine nucleic acid-related substances, ascorbic acid derivatives, and many other additives. Wakamatsu does not, however, specifically teach the use of AMP or like purine nucleic acid-related substances in combination with ascorbic acid or like derivatives. Furthermore, Wakamatsu nowhere discloses specific examples of ascorbic acid derivatives.

Wakamatsu merely discloses that various compounds as examples of the electrolytes that may be added into the O/W emulsion composition. Moreover, Wakamatsu does not disclose ascorbic acid 2-glucoside. This reference does not teach or suggest which components should be used in combination to synergistically improve the antiaging effect. Castiel provides no a connection to an antiaging effect either.

Castiel appears to teach that vitamin C derivatives are more stable than ascorbic acid and may prevent intrinsic aging of the skin. Castiel also appears to suggest ascorbic acid glucoside as one of the examples of ascorbic acid derivatives. However, Castiel is silent about the method for improving the antiaging effect of the vitamin C derivatives. The stability enhancement of the vitamin C derivatives is irrelevant to the improvement of their antiaging effect. One of ordinary skill in the art would not predict improved antiaging effects of vitamin C derivatives from the stability enhancement of vitamin C derivatives.

In sum, the present invention achieves distinctive effects in that skin aging is synergistically retarded by using ascorbic acid 2-glucoside (component (A)) in

combination with a specific purine derivative (component (B)). In other words, the present invention achieves a synergistic effect that cannot be expected from prior art techniques by using ascorbic acid 2-glucoside in combination with a specific purine nucleic acid-related substance. Selecting such a combination of components that achieves such an effect cannot be expected from the disclosure of Wakamatsu, which merely lists a wide variety of electrolyte examples. Even a person skilled in the art would not have easily arrived at the present invention from the disclosure of Wakamatsu, which merely teaches various examples of electrolytes, in view of the teaching of Castiel, which indicates that vitamin C derivatives are stable.

Finally, regarding new claims 21-30, Wakamatsu provides no teaching on compositions that alleviate skin pigmentation or the use of a composition to alleviate skin pigmentation. Moreover, the fact that Castiel does not include ascorbic acid 2-glucoside as a depigmenting agent when ascorbic acid 2-glucoside is discussed elsewhere in the reference demonstrates that Castiel did not consider ascorbic acid 2-glucoside as a substance that could affect skin pigmentation. Notably, Castiel does not teach anything about adenosine phosphates. In sum, neither Wakamatsu nor Castiel instruct the skilled artisan on the ability of a combination of ascorbic acid 2-glucoside and an adenosine phosphate to affect skin pigmentation. In the absence of such guidance, the combination of these references would not have rendered claims 21-30 obvious.

The synergism between ascorbic acid 2-glucoside and a purine nucleic acid-related substance as demonstrated by the specification is unexpected because, as Applicants previously noted, Wakamatsu and Castiel teach that these components act by different mechanisms. See Amendment filed April 30, 2008, p. 12. Specifically,

AMP derivatives have a moisturizing effect and stimulate skin cell turnover whereas ascorbic acid compounds augment epidermal lipogenesis. *Id.* Moreover, neither of these mechanisms have anything to do with skin pigmentation.

For the reasons set forth above, claims 1, 3, 5-13, and 15-18 and new claims 21-30 would not have been obvious to one of ordinary skill in the art based on the combination of Wakamatsu and Castiel. Applicants request that the Office withdraw this rejection accordingly.

Conclusions

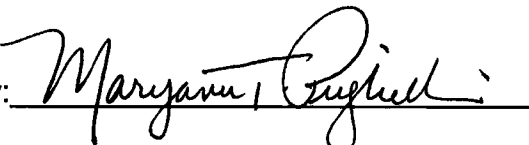
In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration and reexamination of this application and the timely allowance of claims 1, 5, 7-10, 12, 15, 17, 18, and 21-30.

Please grant any extensions of time required to enter this response and charge any additional required fees to Deposit Account No. 06-0916.

Respectfully submitted,

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